# Winery Water Conservation Best Management Practices
# Prepared for the Paso Robles Wine Community
# By the Wine Industry Water Committee established July 20th, 2010

**1. Conducting a Water Audit:**

Water usage should be measured and tracked annually through a Water Audit to increase the potential for saving water by identifying areas where water is wasted or could be reused. The following steps should be used as a general guide to conducting a water audit.

- Identify the major water lines. Determine the quality, quantity, and temperature of water carried by each line.
- Identify all points where water is used, including hose connections. Determine the quantity of water used at each point.
- Determine the capacity and frequency of emptying for each water-containing unit.
- Determine the capacity of each continuous discharge not yet being reused.
- Determine flow rates in floor gutters and whether in the flows are adequate to prevent accumulation of solids.
- Review water use in visitor-serving areas (restrooms, kitchen, and outdoor paved areas).

Results of the audit should be used to make decisions on maintenance, capital improvements and employee training.

**2. Employee Training:**

Employees, managers, and operators should be encouraged to practice good water conserving measures and taught the importance of water conservation from a resource and business standpoint. Feedback on performance (i.e. monthly water usage) needs to be shared and discussed regularly.

**3. Winemaking Operations:**

Water conserving measures should be used for activities during the winemaking process including crush operations, press, tank, and barrel washing and barrel soaking. These measures should include, but not be limited to: a) conducting crush and press activities outside and covered wherever feasible to reduce "baking" of waste material on equipment surface; b) pre-cleaning with appropriate tools (e.g. a stiff brush or squeegee) should occur to loosen and remove large material before wash-down; c) use of a timing system, shut-off valve and/or hot water on high pressure washers or hoses for cleaning processing equipment, tanks, floors, etc. should be installed wherever feasible; d) wash down and barrel soaking is conducted with knowledge of wastewater or septic system capacity.

**4. Written Procedures:**

All written winery procedures should have water conservation elements included with specifics spelled out for rinse times, wash down, water conserving measures, etc.

**5. Landscape:**

a) Landscaping is drip-irrigated from recycled water, whenever feasible, and has automatic irrigation that is set to water all of the plants on an alternating day frequency; b) Irrigation lines are checked monthly for leaks, as well as defective emitters and sprinkler heads; c) 50% of the landscaping utilizes drought-tolerant plants; d) Mulch or compost is applied once a year; e) Turf is minimized.